

Proportional pressure control valve VPPE

FESTO



Characteristics

At a glance

Structure:

- Some selected pressure regulator VPPE types can be screwed onto a profile strip. This has the advantage that a central pressure supply can be achieved through the profile strip.
- Feeding into the profile strip can be done on one side, on both sides through end plates, or by means of intermediate feed (for increased air requirements).
- The holes for the profile strip must be drilled in accordance with the assembly instructions. The VPPE pressure regulators are screwed to the profile strip via the mounting plate. The end plates are screwed to the profile strip on the front left and right. For further information, please refer to the assembly instructions: see internet: vppe

Pressure feed on the profile strip:

- When using the profile strip for central pressure feeding, make sure that the required compressed air supply is guaranteed. Bear in mind that an intermediate feed requires a valve position. The intermediate feed is mounted instead of a VPPE valve position.

Recommendation for pressure feed:

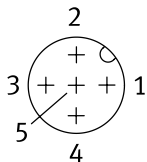
- e.g. for hose Ø 16 mm with simultaneous max. flow rates of all valves, the following applies: pressure feed - number of valves: one-sided - max. 5 valves, both-sided - max. 10 valves, with intermediate feed - max. 5 valves each
- Intermediate feeds always need to be placed centrally. Several intermediate feeds have to be evenly distributed.

Note:

- Mounting VPPE proportional-pressure regulators via a mounting plate on profile strips can only be carried out with the following types: VPPE valve with display and top part turned by 90°, VPPE-...-E1T
- For further information on mounting VPPE proportional-pressure regulators and intermediate feeds on profile strips, please refer to the assembly instructions: see internet: vppe

Series

[VPPE] Proportional pressure control valve



Pin 1: Supply 21.6 ... 26.4 V DC

Pin 2: Setpoint (-)

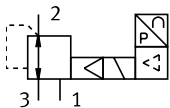
Pin 3: GND (-)

Pin 4: Setpoint (+) 0 ... 10 V DC / 4 ... 20 mA

Pin 5: Actual value output or switching output (selectable via the operator panel)

Switching input/output

[V] 0 ... 10 V



Diagrams

The diagrams shown in this document are also available online. There, it is possible to display precise values.

Type code

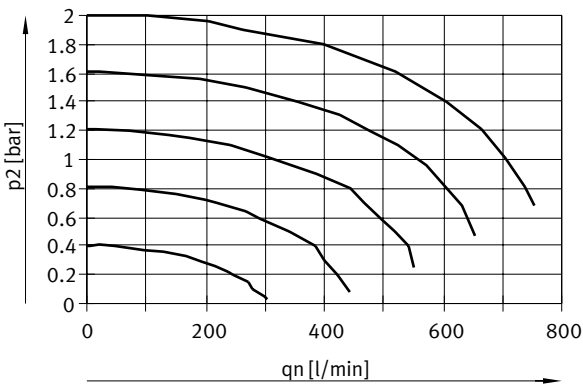
001	Series	
VPPE	Proportional pressure control valve	
002	Directional control function	
3	3-way valve	
003	Valve function	
1	Normally closed	
004	Pneumatic connection	
1/8	Internal thread G1/8	
1/4	Internal thread G1/4	
005	Pressure regulation range	
2	0.02 ... 2 bar	
6	0.06 ... 6 bar	
10	0.1 ... 10 bar	

006	Setpoint input for individual valves	
005	0 ... 5 V	
010	0 ... 10 V	
420	4 ... 20 mA	
MR	Modbus® RTU via RS485	
007	Operator unit/interface	
	Without	
E1	LED display, 7-segment	
008	Assembly	
	Inline valve	
T	Common supply manifold mounting (mounting rail)	
009	Special material properties	
	None	
F1A	Recommended for production plants for manufacturing lithium-ion batteries, F1A	

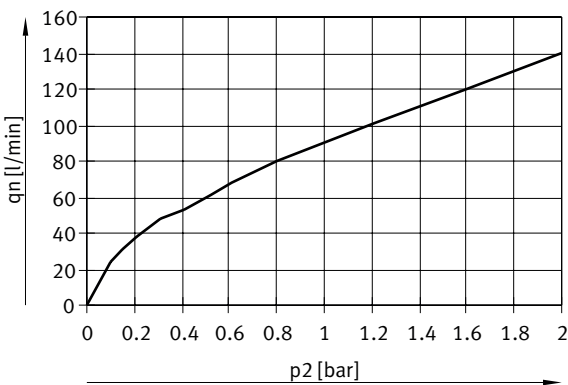
Datasheet

General technical data						
Pressure regulation range MPa	0.002 ... 0.2 MPa		0.01 ... 1 MPa		0.006 ... 0.6 MPa	
Pressure regulation range	0.02 ... 2 bar		0.1 ... 10 bar		0.06 ... 6 bar	
Pneumatic connection 1	G1/8	G1/4	G1/8	G1/4	G1/8	G1/4
Pneumatic connection 2	G1/8	G1/4	G1/8	G1/4	G1/8	G1/4
Pneumatic connection 3	G1/8					
Structural design	Pilot-controlled diaphragm regulator					
Valve function	3-way proportional pressure control valve					
Safety instructions	VPPE safety position: if the supply cable breaks, the outlet pressure is maintained in uncontrolled form.					
Sealing principle	Soft					
Actuation type	Electrical					
Type of control	Piloted					
Type of mounting	With through-hole					
Mounting position	Any, Preferably upright					
Nominal width pressurization	5 mm					
Exhaust nominal width	2.5 mm					
Normal nominal flow rate (normalized to DIN 1343)	310 l/min	700 l/min	1,250 l/min	2,300 l/min	800 l/min	1,700 l/min
Product weight	390 g					

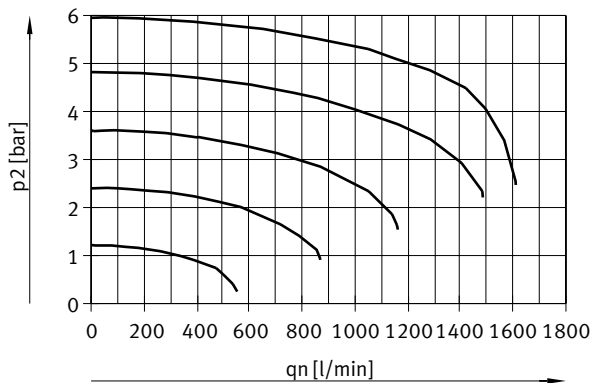
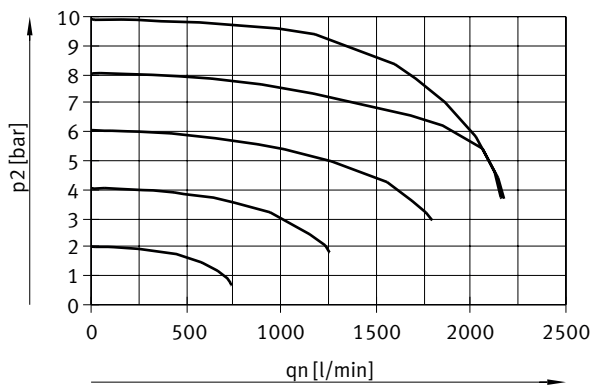
Flow rate qn as a function of outlet pressure p2, VPPE-3-1-1/8-2-..., qn 1 -> 2



Flow rate qn as a function of outlet pressure p2, VPPE-3-1-1/8-2-..., qn 2 -> 3



Datasheet

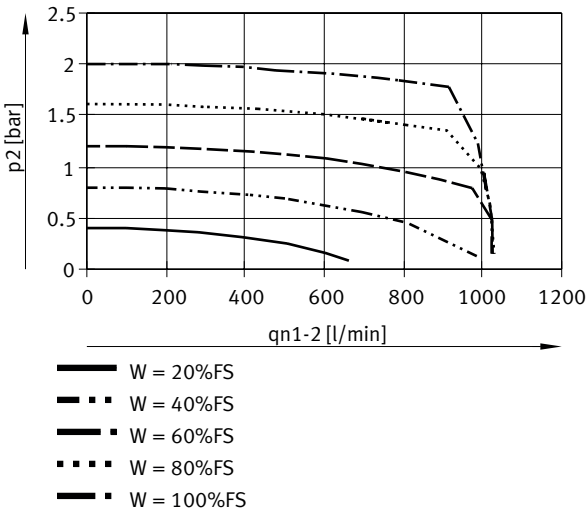
Flow rate q_n as a function of outlet pressure p_2 , VPPE-3-1-1/8-6-..., q_n 1 -> 2Flow rate q_n as a function of outlet pressure p_2 , VPPE-3-1-1/8-6-..., q_n 2 -> 3Flow rate q_n as a function of outlet pressure p_2 , VPPE-3-1-1/8-10-..., q_n 1 -> 2

Datasheet

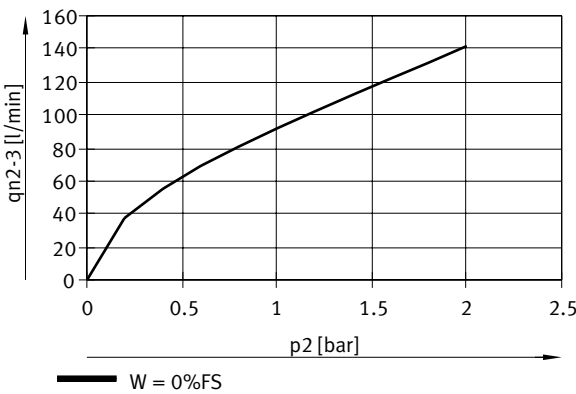
Flow rate q_n as a function of outlet pressure p_2 , VPPE-3-1-1/8-10-..., q_n 2 -> 3



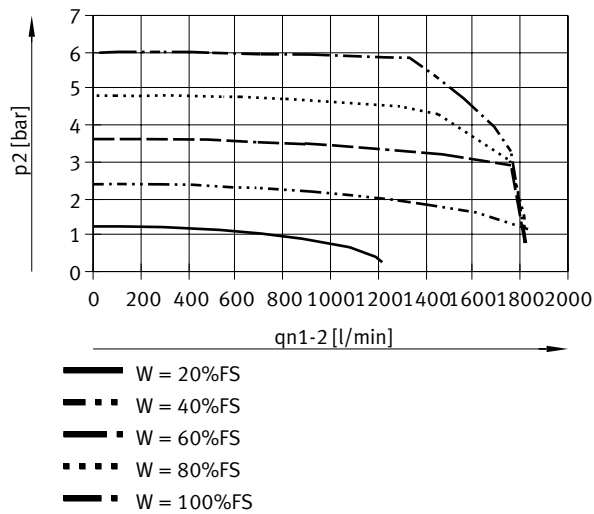
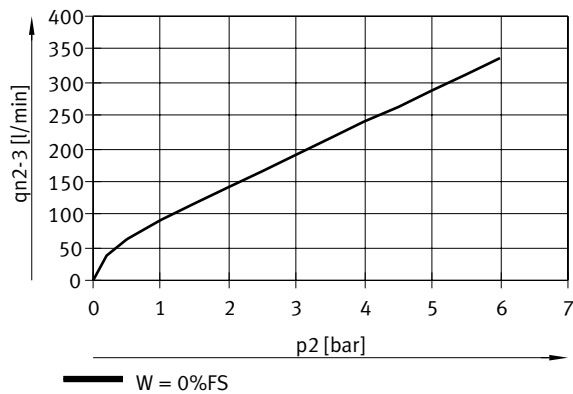
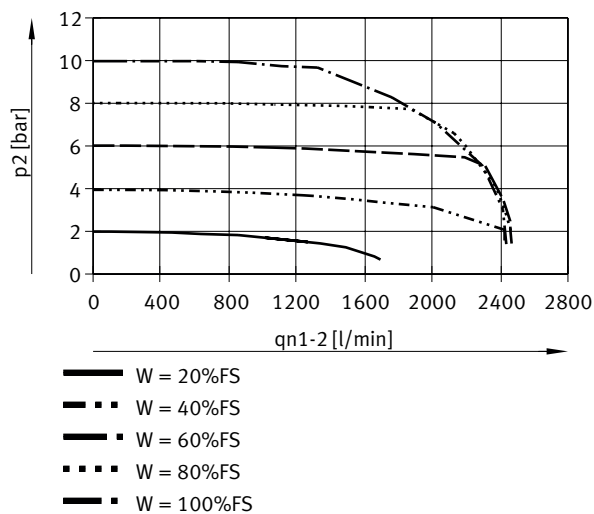
Flow rate q_n as a function of outlet pressure p_2 , VPPE-3-1-1/4-2-..., q_n 1 -> 2



Flow rate q_n as a function of outlet pressure p_2 , VPPE-3-1-1/4-2-..., q_n 2 -> 3

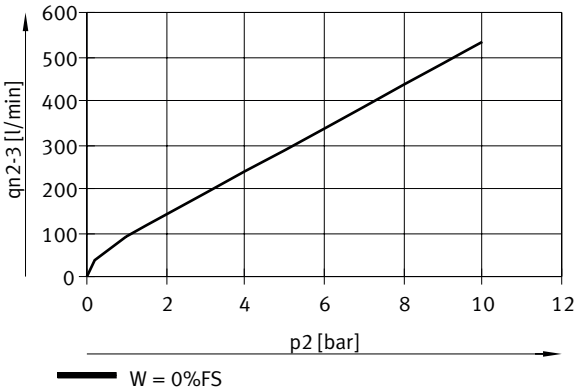


Datasheet

Flow rate q_n as a function of outlet pressure p_2 , VPPE-3-1-1/4-6-..., $q_n 1 \rightarrow 2$ Flow rate q_n as a function of outlet pressure p_2 , VPPE-3-1-1/4-6-..., $q_n 2 \rightarrow 3$ Flow rate q_n as a function of outlet pressure p_2 , VPPE-3-1-1/4-10-..., $q_n 1 \rightarrow 2$ 

Datasheet

Flow rate qn as a function of outlet pressure p2, VPPE-3-1-1/4-10-..., qn 2 -> 3



Electrical data					
Analog output signal range	0 - 10 V		1 - 5 V		4 - 20 mA
Analog input signal range	0 - 10 V		0 - 5 V		4 - 20 mA
Pneumatic connection 1	G1/8	G1/4	G1/8	G1/4	G1/8 G1/4
Electrical connection	5-pin, M12, Plug				
DC operating voltage range	21.6 ... 26.4 V				
Display type	LED indicator, 3-digit				
Residual ripple	10%				
Max. electrical power consumption	4.2 W				
Max. current consumption	160 mA				
Short-circuit protection	For all electrical connections				
Reverse polarity protection	for all electrical connections				
Switching output	PNP				
Degree of protection	IP65				

Datasheet

Operating and environmental conditions, 4... 20 mA, G1/4			
Inlet pressure 1 MPa	0.6 ... 0.8 MPa	0.6 ... 1.1 MPa	0.3 ... 0.4 MPa
Inlet pressure 1	6 ... 8 bar	6 ... 11 bar	3 ... 4 bar
Pressure regulation range MPa	0.006 ... 0.6 MPa	0.01 ... 1 MPa	0.002 ... 0.2 MPa
Pressure regulation range	0.06 ... 6 bar	0.1 ... 10 bar	0.02 ... 2 bar
Setpoint input for individual valves	4 ... 20 mA		
Pneumatic connection 1	G1/4		
Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4], Inert gases		
Information on operating and pilot media	Operation with oil lubrication not possible		
Max. pressure hysteresis	0.003 MPa	0.005 MPa	0.002 MPa
Max. pressure hysteresis	0.03 bar	0.05 bar	0.02 bar
Hysteresis	1 %FS		
Reproducibility	0.5 %FS		1.5 %FS
Linearity	1 %FS		
Overall accuracy	1.25%FS		
Temperature coefficient	0.04 %/K		
Duty cycle	100%		
Ambient temperature	0 ... 60°C		
Temperature of medium	10 ... 50°C		
Corrosion resistance class (CRC) ¹⁾	2 - Moderate corrosion stress		
CE marking (see declaration of conformity) ²⁾	As per EU EMC directive As per EU RoHS directive		
UKCA marking (see declaration of conformity) ³⁾	To UK instructions for EMC To UK RoHS instructions		
Certification	RCM compliance mark c UL us - Listed (OL)		

1) For more information, visit www.festo.com/x/topic/kbk

2) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

3) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

Datasheet

Operating and environmental conditions, 0... 10 V, G1/4			
Inlet pressure 1 MPa	0.6 ... 0.8 MPa	0.6 ... 1.1 MPa	0.3 ... 0.4 MPa
Inlet pressure 1	6 ... 8 bar	6 ... 11 bar	3 ... 4 bar
Pressure regulation range MPa	0.006 ... 0.6 MPa	0.01 ... 1 MPa	0.002 ... 0.2 MPa
Pressure regulation range	0.06 ... 6 bar	0.1 ... 10 bar	0.02 ... 2 bar
Setpoint input for individual valves	0 ... 10 V		
Pneumatic connection 1	G1/4		
Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4], Inert gases		
Information on operating and pilot media	Operation with oil lubrication not possible		
Max. pressure hysteresis	0.003 MPa	0.005 MPa	0.002 MPa
Max. pressure hysteresis	0.03 bar	0.05 bar	0.02 bar
Hysteresis	1 %FS		
Reproducibility	0.5 %FS		1.5 %FS
Linearity	1 %FS		
Overall accuracy	1.25%FS		
Temperature coefficient	0.04 %/K		
Duty cycle	100%		
Ambient temperature	0 ... 60°C		
Temperature of medium	10 ... 50°C		
Corrosion resistance class (CRC) ¹⁾	2 - Moderate corrosion stress		
CE marking (see declaration of conformity) ²⁾	As per EU EMC directive As per EU RoHS directive		
UKCA marking (see declaration of conformity) ³⁾	To UK instructions for EMC To UK RoHS instructions		
Certification	RCM compliance mark c UL us - Listed (OL)		

1) For more information, visit www.festo.com/x/topic/kbk

2) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

3) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

Datasheet

Operating and environmental conditions, 0... 5 V, G1/4			
Inlet pressure 1 MPa	0.6 ... 0.8 MPa	0.6 ... 1.1 MPa	0.3 ... 0.4 MPa
Inlet pressure 1	6 ... 8 bar	6 ... 11 bar	3 ... 4 bar
Pressure regulation range MPa	0.006 ... 0.6 MPa	0.01 ... 1 MPa	0.002 ... 0.2 MPa
Pressure regulation range	0.06 ... 6 bar	0.1 ... 10 bar	0.02 ... 2 bar
Setpoint input for individual valves	0 ... 5 V		
Pneumatic connection 1	G1/4		
Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4], Inert gases		
Information on operating and pilot media	Operation with oil lubrication not possible		
Max. pressure hysteresis	0.003 MPa	0.005 MPa	0.002 MPa
Max. pressure hysteresis	0.03 bar	0.05 bar	0.02 bar
Hysteresis	1 %FS		
Reproducibility	0.5 %FS		1.5 %FS
Linearity	1 %FS		
Overall accuracy	1.25%FS		
Temperature coefficient	0.04 %/K		
Duty cycle	100%		
Ambient temperature	0 ... 60°C		
Temperature of medium	10 ... 50°C		
Corrosion resistance class (CRC) ¹⁾	2 - Moderate corrosion stress		
CE marking (see declaration of conformity) ²⁾	As per EU EMC directive As per EU RoHS directive		
UKCA marking (see declaration of conformity) ³⁾	To UK instructions for EMC To UK RoHS instructions		
Certification	RCM compliance mark c UL us - Listed (OL)		

1) For more information, visit www.festo.com/x/topic/kbk

2) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

3) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

Datasheet

Operating and environmental conditions, Modbus RTU via RS485, G1/4			
Inlet pressure 1 MPa	0.6 ... 0.8 MPa	0.6 ... 1.1 MPa	0.3 ... 0.4 MPa
Inlet pressure 1	6 ... 8 bar	6 ... 11 bar	3 ... 4 bar
Pressure regulation range MPa	0.006 ... 0.6 MPa	0.01 ... 1 MPa	0.002 ... 0.2 MPa
Pressure regulation range	0.06 ... 6 bar	0.1 ... 10 bar	0.02 ... 2 bar
Setpoint input for individual valves	Modbus® RTU via RS485		
Pneumatic connection 1	G1/4		
Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4], Inert gases		
Information on operating and pilot media	Operation with oil lubrication not possible		
Max. pressure hysteresis	0.003 ... 0.004 MPa	0.005 ... 0.007 MPa	0.002 MPa
Max. pressure hysteresis	0.03 ... 0.04 bar	0.05 ... 0.07 bar	0.02 bar
Hysteresis	0.7 %FS		1 %FS
Reproducibility	0.6 ... 0.7 %FS	0.5 %FS	1 %FS
Linearity	1 %FS		
Overall accuracy	1.25%FS		1.5%FS
Temperature coefficient	0.04 %/K		
Duty cycle	100%		
Ambient temperature	0 ... 60°C		
Temperature of medium	10 ... 50°C		
Corrosion resistance class (CRC) ¹⁾	2 - Moderate corrosion stress		
CE marking (see declaration of conformity) ²⁾	As per EU EMC directive As per EU RoHS directive		
UKCA marking (see declaration of conformity) ³⁾	To UK instructions for EMC To UK RoHS instructions		
Certification	RCM compliance mark c UL us - Listed (OL)		

1) For more information, visit www.festo.com/x/topic/kbk

2) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

3) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

Datasheet

Operating and environmental conditions, 4... 20 mA, G1/8

Inlet pressure 1 MPa	0.6 ... 0.8 MPa	0.6 ... 1.1 MPa	0.3 ... 0.4 MPa
Inlet pressure 1	6 ... 8 bar	6 ... 11 bar	3 ... 4 bar
Pressure regulation range MPa	0.006 ... 0.6 MPa	0.01 ... 1 MPa	0.002 ... 0.2 MPa
Pressure regulation range	0.06 ... 6 bar	0.1 ... 10 bar	0.02 ... 2 bar
Setpoint input for individual valves	4 ... 20 mA		
Pneumatic connection 1	G1/8		
Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4], Inert gases		
Information on operating and pilot media	Operation with oil lubrication not possible		
Max. pressure hysteresis	0.003 MPa	0.005 MPa	0.002 MPa
Max. pressure hysteresis	0.03 bar	0.05 bar	0.02 bar
Hysteresis	0.5 %FS		1 %FS
Reproducibility	0.5 %FS		
Linearity	1 %FS		
Overall accuracy	1.25%FS		1.5%FS
Temperature coefficient	0.04 %/K		
Duty cycle	100%		
Ambient temperature	0 ... 60°C		
Temperature of medium	10 ... 50°C		
Corrosion resistance class (CRC) ¹⁾	2 - Moderate corrosion stress		
CE marking (see declaration of conformity) ²⁾	As per EU EMC directive As per EU RoHS directive		
UKCA marking (see declaration of conformity) ³⁾	To UK instructions for EMC To UK RoHS instructions		
Certification	RCM compliance mark c UL us - Listed (OL)		

1) For more information, visit www.festo.com/x/topic/kbk

2) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

3) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

Datasheet

Operating and environmental conditions, 0... 10 V, G1/8			
Inlet pressure 1 MPa	0.6 ... 0.8 MPa	0.6 ... 1.1 MPa	0.3 ... 0.4 MPa
Inlet pressure 1	6 ... 8 bar	6 ... 11 bar	3 ... 4 bar
Pressure regulation range MPa	0.006 ... 0.6 MPa	0.01 ... 1 MPa	0.002 ... 0.2 MPa
Pressure regulation range	0.06 ... 6 bar	0.1 ... 10 bar	0.02 ... 2 bar
Setpoint input for individual valves	0 ... 10 V		
Pneumatic connection 1	G1/8		
Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4], Inert gases		
Information on operating and pilot media	Operation with oil lubrication not possible		
Max. pressure hysteresis	0.003 MPa	0.005 MPa	0.002 MPa
Max. pressure hysteresis	0.03 bar	0.05 bar	0.02 bar
Hysteresis	0.5 %FS		1 %FS
Reproducibility	0.5 %FS		
Linearity	1 %FS		
Overall accuracy	1.25%FS		1.5%FS
Temperature coefficient	0.04 %/K		
Duty cycle	100%		
Ambient temperature	0 ... 60°C		
Temperature of medium	10 ... 50°C		
Corrosion resistance class (CRC) ¹⁾	2 - Moderate corrosion stress		
CE marking (see declaration of conformity) ²⁾	As per EU EMC directive As per EU RoHS directive		
UKCA marking (see declaration of conformity) ³⁾	To UK instructions for EMC To UK RoHS instructions		
Certification	RCM compliance mark c UL us - Listed (OL)		

1) For more information, visit www.festo.com/x/topic/kbk

2) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

3) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

Datasheet

Operating and environmental conditions, 0... 5 V, G1/8

Inlet pressure 1 MPa	0.6 ... 0.8 MPa	0.6 ... 1.1 MPa
Inlet pressure 1	6 ... 8 bar	6 ... 11 bar
Pressure regulation range MPa	0.006 ... 0.6 MPa	0.01 ... 1 MPa
Pressure regulation range	0.06 ... 6 bar	0.1 ... 10 bar
Setpoint input for individual valves	0 ... 5 V	
Pneumatic connection 1	G1/8	
Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4], Inert gases	
Information on operating and pilot media	Operation with oil lubrication not possible	
Max. pressure hysteresis	0.003 MPa	0.005 MPa
Max. pressure hysteresis	0.03 bar	0.05 bar
Hysteresis	0.5 %FS	
Reproducibility	0.5 %FS	
Linearity	1 %FS	
Overall accuracy	1.25%FS	
Temperature coefficient	0.04 %/K	
Duty cycle	100%	
Ambient temperature	0 ... 60°C	
Temperature of medium	10 ... 50°C	
Corrosion resistance class (CRC) ¹⁾	2 - Moderate corrosion stress	
CE marking (see declaration of conformity) ²⁾	As per EU EMC directive As per EU RoHS directive	
UKCA marking (see declaration of conformity) ³⁾	To UK instructions for EMC To UK RoHS instructions	
Certification	RCM compliance mark c UL us - Listed (OL)	

1) For more information, visit www.festo.com/x/topic/kbk

2) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

3) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

Datasheet

Operating and environmental conditions, Modbus RTU via RS485, G1/8

Inlet pressure 1 MPa	0.6 ... 0.8 MPa	0.6 ... 1.1 MPa	0.3 ... 0.4 MPa
Inlet pressure 1	6 ... 8 bar	6 ... 11 bar	3 ... 4 bar
Pressure regulation range MPa	0.006 ... 0.6 MPa	0.01 ... 1 MPa	0.002 ... 0.2 MPa
Pressure regulation range	0.06 ... 6 bar	0.1 ... 10 bar	0.02 ... 2 bar
Pneumatic connection 1	G1/8		
Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4], Inert gases		
Information on operating and pilot media	Operation with oil lubrication not possible		
Max. pressure hysteresis	0.004 MPa	0.007 MPa	0.002 MPa
Max. pressure hysteresis	0.04 bar	0.07 bar	0.02 bar
Hysteresis	0.7 %FS		1 %FS
Reproducibility	0.6 %FS	0.5 %FS	1 %FS
Linearity	1 %FS		
Overall accuracy	1.25%FS		1.5%FS
Temperature coefficient	0.04 %/K		
Duty cycle	100%		
Ambient temperature	0 ... 60°C		
Temperature of medium	10 ... 50°C		
Corrosion resistance class (CRC) ¹⁾	2 - Moderate corrosion stress		
CE marking (see declaration of conformity) ²⁾	As per EU EMC directive As per EU RoHS directive		
UKCA marking (see declaration of conformity) ³⁾	To UK instructions for EMC To UK RoHS instructions		
Certification	RCM compliance mark c UL us - Listed (OL)		

1) For more information, visit www.festo.com/x/topic/kbk

2) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

3) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

Materials, mounting plate (set)

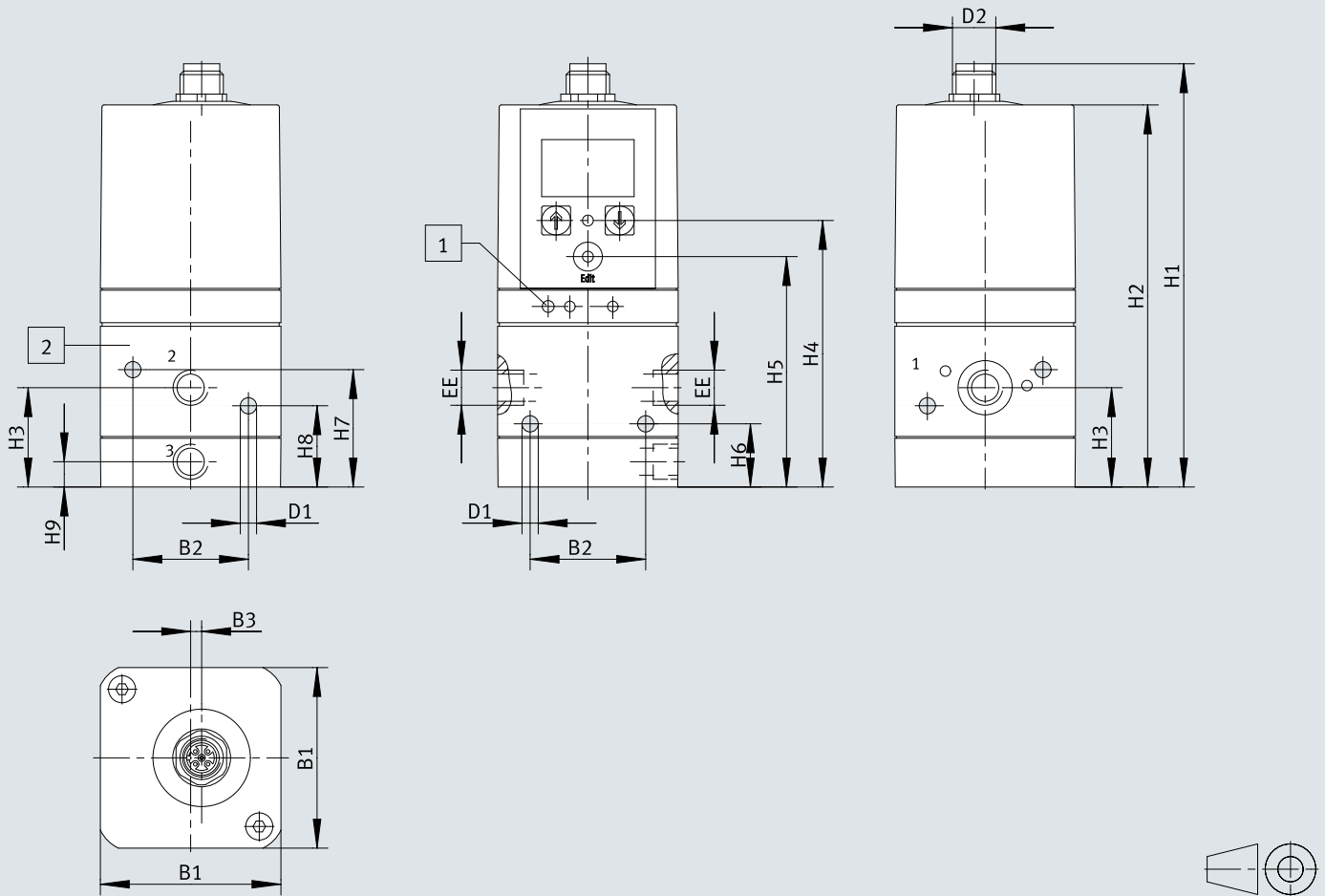
Plate material	Wrought aluminum alloy
Seals material	NBR
Material of screws	Steel
Note on materials	RoHS compliant
Corrosion resistance class (CRC) ¹⁾	2 - Moderate corrosion stress

1) Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements in direct contact with a normal industrial environment.

Dimensions

Dimensions – VPPE

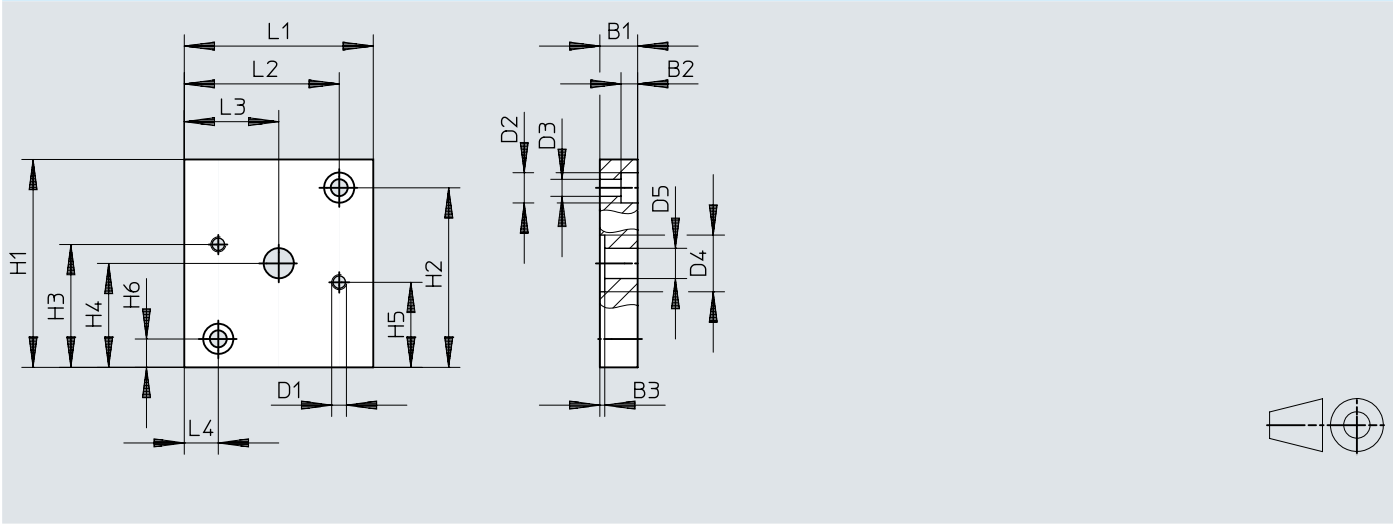
Download CAD data www.festo.com

- [1] Grounding hole
 [2] Booster with variant VPPE-...-E1T rotated by 90°

	B1	B2	B3	D1 Ø	D2	EE	H1	H2	H3	H4	H5	H6	H7	H8	H9
VPPE-3-1-1/8- ... E1 ...	50	32	3,1	4,5	M12x1	G1/8	117,2	105,8	27,5	73,8	63,8	17,5	32,5	22,5	7
VPPE-3-1-1/4- ... E1 ...						G1/4									

Dimensions

Dimensions – Mounting plate Download CAD data www.festo.com



	B1	B2	B3	D1	D2 Ø	D3 Ø	D4 Ø	D5 Ø	H1	H2	H3	H4	H5	H6	L1	L2	L3	L4
VAME-P5-MK	10	4,6	1,3	M4	8	4,5	15	8	55	47,5	32,5	27,5	22,5	7,5	50	41	25	9

Ordering data

VPPE, in-line valve							
	Pressure regulation range MPa	Pressure regulation range	Analog output signal range	Analog input signal range	Reproducibility	Part no.	Type
	0.002 ... 0.2 MPa	0.02 ... 2 bar	0 - 10 V	0 - 10 V	0.5 %FS	557771	VPPE-3-1-1/8-2-010-E1
			4 - 20 mA	4 - 20 mA		557774	VPPE-3-1-1/8-2-420-E1
	0.006 ... 0.6 MPa	0.06 ... 6 bar	0 - 10 V	0 - 10 V		557772	VPPE-3-1-1/8-6-010-E1
			4 - 20 mA	4 - 20 mA		557775	VPPE-3-1-1/8-6-420-E1
	0.01 ... 1 MPa	0.1 ... 10 bar	0 - 10 V	0 - 10 V		557773	VPPE-3-1-1/8-10-010-E1
			4 - 20 mA	4 - 20 mA		557776	VPPE-3-1-1/8-10-420-E1

VPPE, common supply manifold							
	Pressure regulation range MPa	Pressure regulation range	Analog output signal range	Analog input signal range	Reproducibility	Part no.	Type
	0.002 ... 0.2 MPa	0.02 ... 2 bar	0 - 10 V	0 - 10 V	0.5 %FS	557777	VPPE-3-1-1/8-2-010-E1T
			4 - 20 mA	4 - 20 mA		557779	VPPE-3-1-1/8-2-420-E1T
	0.006 ... 0.6 MPa	0.06 ... 6 bar	0 - 10 V	0 - 10 V		567539	VPPE-3-1-1/8-6-010-E1T
			4 - 20 mA	4 - 20 mA		567540	VPPE-3-1-1/8-6-420-E1T
	0.01 ... 1 MPa	0.1 ... 10 bar	0 - 10 V	0 - 10 V		557778	VPPE-3-1-1/8-10-010-E1T
			4 - 20 mA	4 - 20 mA		557780	VPPE-3-1-1/8-10-420-E1T

VPPE, F1A, recommended for production systems for the manufacture of Li-ion batteries, thread G1/8							
	Pressure regulation range MPa	Pressure regulation range	Analog output signal range	Analog input signal range	Reproducibility	Part no.	Type
	0.002 ... 0.2 MPa	0.02 ... 2 bar			1 %FS	8168527	VPPE-3-1-1/8-2-MR-E1-F1A
					0.6 %FS	8168528	VPPE-3-1-1/8-6-MR-E1-F1A
	0.006 ... 0.6 MPa	0.06 ... 6 bar	0 - 10 V	0 - 10 V	0.5 %FS	8156419	VPPE-3-1-1/8-6-010-E1-F1A
			1 - 5 V	0 - 5 V		8156421	VPPE-3-1-1/8-6-005-E1-F1A
			4 - 20 mA	4 - 20 mA		8156423	VPPE-3-1-1/8-6-420-E1-F1A
						8168529	VPPE-3-1-1/8-10-MR-E1-F1A
	0.01 ... 1 MPa	0.1 ... 10 bar	0 - 10 V	0 - 10 V		8156420	VPPE-3-1-1/8-10-010-E1-F1A
			1 - 5 V	0 - 5 V		8156422	VPPE-3-1-1/8-10-005-E1-F1A
			4 - 20 mA	4 - 20 mA		8156424	VPPE-3-1-1/8-10-420-E1-F1A

VPPE, F1A, recommended for production systems for the manufacture of Li-ion batteries, thread G1/4							
	Pressure regulation range MPa	Pressure regulation range	Analog output signal range	Analog input signal range	Reproducibility	Part no.	Type
	0.002 ... 0.2 MPa	0.02 ... 2 bar			1 %FS	8181689	VPPE-3-1-1/4-2-MR-E1-F1A

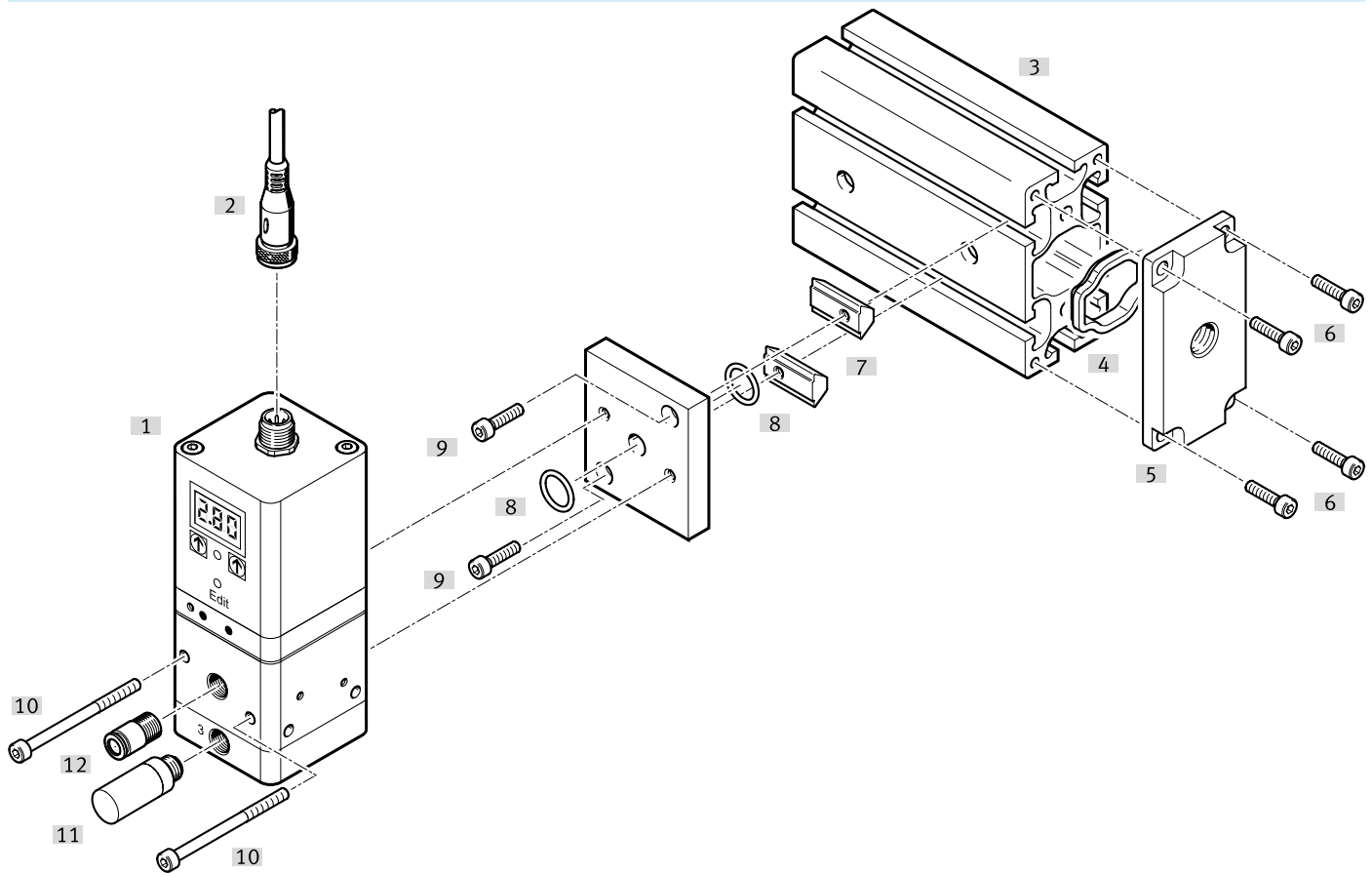
Ordering data

VPPE, F1A, recommended for production systems for the manufacture of Li-ion batteries, thread G1/4							
	Pressure regulation range MPa	Pressure regulation range	Analog output signal range	Analog input signal range	Reproducibility	Part no.	Type
	0.002 ... 0.2 MPa	0.02 ... 2 bar	0 - 10 V	0 - 10 V	1.5 %FS	8181683	VPPE-3-1-1/4-2-010-E1-F1A
			1 - 5 V	0 - 5 V		8181680	VPPE-3-1-1/4-2-005-E1-F1A
			4 - 20 mA	4 - 20 mA		8181686	VPPE-3-1-1/4-2-420-E1-F1A
	0.006 ... 0.6 MPa	0.06 ... 6 bar			0.7 %FS	8181690	VPPE-3-1-1/4-6-MR-E1-F1A
			0 - 10 V	0 - 10 V	0.5 %FS	8181684	VPPE-3-1-1/4-6-010-E1-F1A
			1 - 5 V	0 - 5 V		8181681	VPPE-3-1-1/4-6-005-E1-F1A
			4 - 20 mA	4 - 20 mA		8181687	VPPE-3-1-1/4-6-420-E1-F1A
	0.01 ... 1 MPa	0.1 ... 10 bar			0.5 %FS	8181691	VPPE-3-1-1/4-10-MR-E1-F1A
			0 - 10 V	0 - 10 V		8181685	VPPE-3-1-1/4-10-010-E1-F1A
			1 - 5 V	0 - 5 V		8181682	VPPE-3-1-1/4-10-005-E1-F1A
			4 - 20 mA	4 - 20 mA		8181688	VPPE-3-1-1/4-10-420-E1-F1A

VPPE, common supply manifold, F1A, recommended for production systems for the manufacture of Li-ion batteries, thread G1/4							
	Pressure regulation range MPa	Pressure regulation range	Analog output signal range	Analog input signal range	Reproducibility	Part no.	Type
	0.002 ... 0.2 MPa	0.02 ... 2 bar			1 %FS	8202577	VPPE-3-1-1/4-2-MR-E1T-F1A
			0 - 10 V	0 - 10 V	1.5 %FS	8202571	VPPE-3-1-1/4-2-010-E1T-F1A
			1 - 5 V	0 - 5 V		8202568	VPPE-3-1-1/4-2-005-E1T-F1A
			4 - 20 mA	4 - 20 mA		8202574	VPPE-3-1-1/4-2-420-E1T-F1A
	0.006 ... 0.6 MPa	0.06 ... 6 bar			0.6 %FS	8202578	VPPE-3-1-1/4-6-MR-E1T-F1A
			0 - 10 V	0 - 10 V	0.5 %FS	8202572	VPPE-3-1-1/4-6-010-E1T-F1A
			1 - 5 V	0 - 5 V		8202569	VPPE-3-1-1/4-6-005-E1T-F1A
			4 - 20 mA	4 - 20 mA		8202575	VPPE-3-1-1/4-6-420-E1T-F1A
	0.01 ... 1 MPa	0.1 ... 10 bar			0.5 %FS	8202579	VPPE-3-1-1/4-10-MR-E1T-F1A
			0 - 10 V	0 - 10 V		8202573	VPPE-3-1-1/4-10-010-E1T-F1A
			1 - 5 V	0 - 5 V		8202570	VPPE-3-1-1/4-10-005-E1T-F1A
			4 - 20 mA	4 - 20 mA		8202576	VPPE-3-1-1/4-10-420-E1T-F1A

Peripherals overview

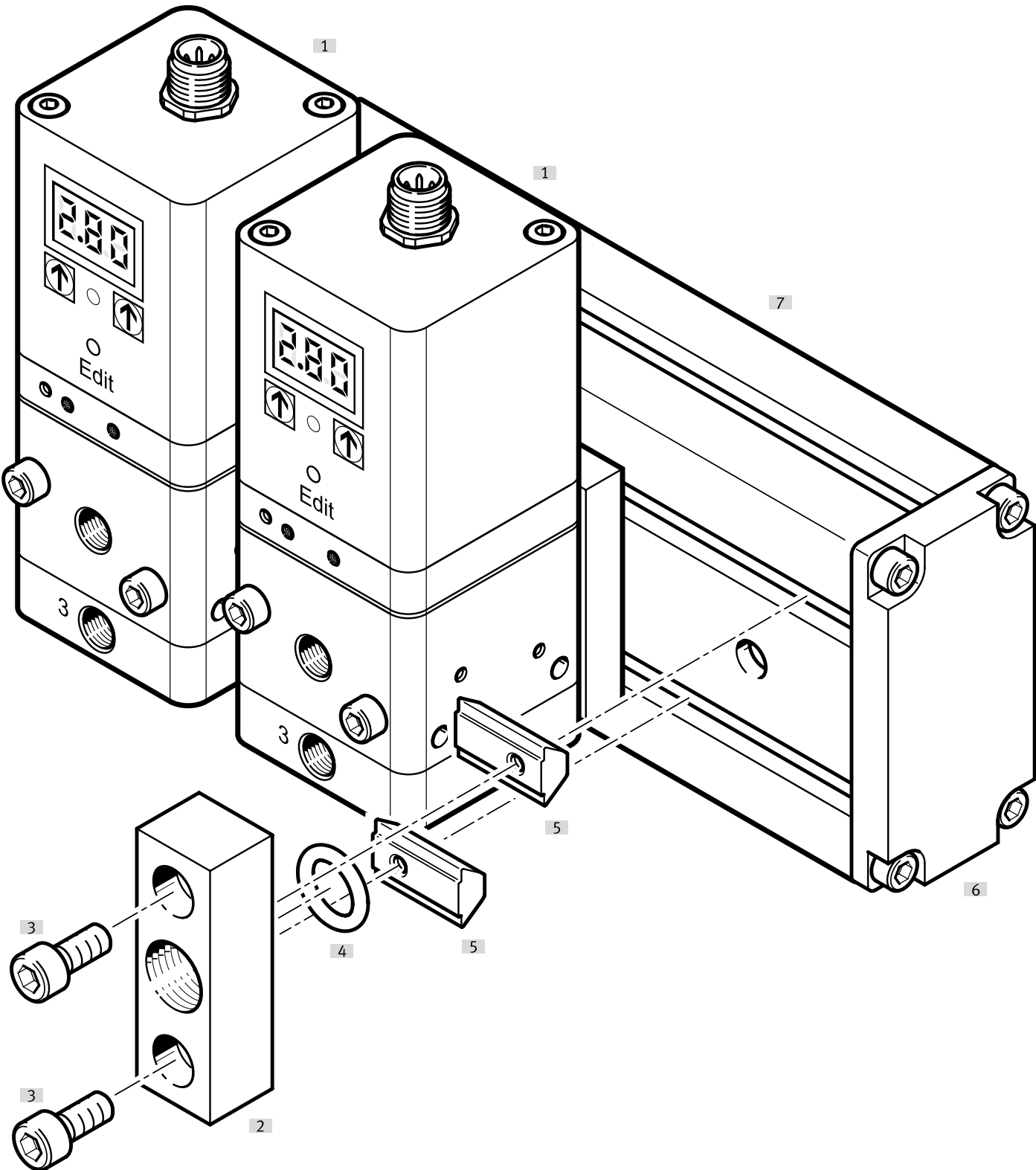
VPPE



Accessories			→ Page/Internet
Type/order code	Description		
[1] Proportional pressure regulator	VPPE		↗ –
[2] Connecting cable	with straight plug socket for actuating the VPPE		24
[3] Mounting rail	Standard profile strip as central air supply		24
[4] Compressed air supply plate (set)	for supplying compressed air (consists of compressed air supply plate, screws and seal)		24
[5] Sealing	–		↗ –
[6] Socket head screw M5x12	for fitting pressure supply plate with profile strip		↗ –
[7] Slot nuts	for fastening on the profile strip using clamps		↗ –
[8] O-ring	for sealing		↗ –
[9] Socket head screw M5x12	for fitting pressure supply plate with profile strip		↗ –
[10] Socket head screw M4x16	for fitting the mounting plate to the slot nut		↗ –
[11] Silencer	for mounting in exhaust ports		↗ u
[12] Push-in fitting	for connecting tubing with standard O.D.		↗ quick star

Peripherals overview

Additional supply



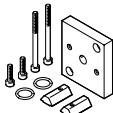
Accessories		→ Page/Internet
Type/order code	Description	
[1] Proportional pressure regulator	VPPE	⌕ -
[2] Additional supply (set)	for supplying compressed air (consists of compressed air supply plate, screws and seal)	25
[3] Socket head screw M6x20	for fitting pressure supply plate with slot nut	⌕ -
[4] O-ring	for sealing	⌕ -

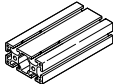
Peripherals overview

Accessories		→ Page/Internet
Type/order code	Description	
[5] Slot nuts	for fastening on the profile strip using clamps	↗ –
[6] End plate (SET)	for sealing the profile strip (consists of an end plate, screws and seal)	24
[7] Mounting rail	Standard profile strip as central air supply	24

Accessories

Connecting cable, straight				
	Electrical connection 1, connection technology	Cable length	Part no.	Type
	M12x1 A-coded as per EN 61076-2-101	2.5 m	8078242	NEBA-M12G5-U-2.5-N-LE5
		5 m	8078243	NEBA-M12G5-U-5-N-LE5

Set of mounting plate, consisting of: 1x mounting plate, 2x cylinder screws M4X55, 2x cylinder screws M4X16, 2x slot nut, 2x O-ring				
	Product weight	Part no.	Type	
	110 g	570966	VAME-P5-MK	

Profile column (profile strip), made of aluminum, as central air supply, length: individually adjustable				
	Mounting position	Part no.	Type	
	Any	175964	HMBS-80/40- -	

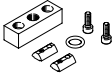
Closed end plate set, for sealing the profile strip, consisting of: 1x plate, 1x seal, 4x cylinder screws M5x12				
	Product weight	Part no.	Type	
	96 g	8021858	VABE-P5-C	

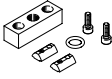
Set pressure feed plate, with connection thread G1/4, consisting of: 1x plate with connection thread G1/4, 1x seal, 4x cylinder screws M5x12				
	Product weight	Part no.	Type	
	88 g	8021859	VABF-P5-P3A3-G14	

Set pressure feed plate, with connection thread G3/8, consisting of: 1x plate with connection thread G3/8, 1x seal, 4x cylinder screws M5x12				
	Product weight	Part no.	Type	
	87 g	8021860	VABF-P5-P3A3-G38	

Set pressure feed plate, with connection thread G1/2, consisting of: 1x plate with connection thread G1/2, 1x seal, 4x cylinder screws M5x12				
	Product weight	Part no.	Type	
	85 g	8021861	VABF-P5-P3A3-G12	

Accessories

Additional supply set, with connection thread G1/4, consisting of: 1x plate with connection G1/4, 1x O-ring, 2x slot nut, 2x cylinder screws M6x20			
	Product weight	Part no.	Type
	61 g	8021862	VABF-P5-P1A3-G14

Additional supply set, with connection G3/8, consisting of: 1x plate with connection thread G3/8, 1x O-ring, 2x slot nut, 2x cylinder screws M6x20			
	Product weight	Part no.	Type
	58 g	8021863	VABF-P5-P1A3-G38